

## MEASURING PROGRESS AND EFFECTS IN IRREGULAR WARFARE

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USAWC STRATEGY RESEARCH PROJECT

**MEASURING PROGRESS AND EFFECTS IN IRREGULAR WARFARE**

by

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## **ABSTRACT**

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This paper examines how to measure progress and effects in irregular warfare. The paper establishes a context by describing what exactly irregular warfare is and then explores current U.S. military doctrine to see what guidance it provides to measure progress and effects. It then examines several methods and models that one could use to measure progress and effects, and recommends the most appropriate. It explores how Special Operations Forces (S.O.F.) could measure the progress and effects of their conduct of counterinsurgency-related irregular warfare operations in environments other than Iraq and Afghanistan, and explores the applicability of such measures in other irregular warfare activities.





## MEASURING PROGRESS AND EFFECTS IN IRREGULAR WARFARE

There is broad agreement that in the future the U.S. military will continue to face irregular threats such as it has seen throughout the last ten years. Within the last five years both U.S. Army doctrine and the U.S. military's joint doctrine have acknowledged the significance of irregular threats. Because of these threats both have recognized that the character of the wars the U.S. is currently fighting and will likely fight in the future contain an irregular aspect that the U.S. military must confront. In order to be successful in irregular warfare, as in all warfare, one must be able to accurately measure progress and effects. In a type of warfare that relies less on dominating terrain and attriting enemy forces than it does on influencing people, such measures of progress and effects are not as obvious as they are in traditional warfare. Furthermore, understanding such warfare requires much more than only understanding the actions of two opposing forces. In complex environments such as insurgencies and other irregular warfare activities the number of variables that affect the situation may be so great that a force may never have enough information to truly understand such a complex, constantly changing environment.<sup>1</sup> How then should a force measure its progress and effects when conducting irregular warfare activities? As Clancy and Crossett point out, "we do not yet possess a framework within which we might interpret success or failure against insurgency or terrorism operations. Nor do we have a solid set of measures of effectiveness (MOE) with which to frame an understanding of data."<sup>2</sup>

This paper examines how to measure progress and effects in irregular warfare. The paper establishes a context by describing what exactly irregular warfare is and then explores current U.S. military doctrine to see what guidance it provides to measure

progress and effects. The paper then examines several methods and models that could be used to measure progress and effects, and recommends the most appropriate. It will explore how Special Operations Forces (S.O.F.) could measure the progress and effects of their conduct of counterinsurgency-related irregular warfare operations in environments other than Iraq and Afghanistan, and will explore the applicability of such measures in other irregular warfare activities.

### U.S. Military Doctrine

Current U.S. military doctrine recognizes the significance of irregular warfare. The U.S. military's capstone doctrinal document, Joint Publication 1, *Doctrine for the Armed Forces of the United States*, describes the strategic security environment as consisting of traditional warfare and irregular warfare. Traditional warfare is characterized as a confrontation between states or coalitions of states usually involving force-on-force military operations to defeat an adversary's armed forces.<sup>3</sup> JP 1 then defines irregular warfare as a violent struggle among state and non-state actors for legitimacy and influence over a relevant population.<sup>4</sup> Irregular warfare focuses on eroding an adversary's power, influence, and will in order to exercise political authority over a relevant population.<sup>5</sup> Thus, U.S. military doctrine recognizes that war has an irregular characteristic as well as a traditional characteristic that accounts for the nature of wars we are experiencing today.<sup>6</sup>

The Irregular Warfare Joint Operating Concept (IW JOC) lists fourteen activities which comprise irregular warfare. Most significant among those activities to S.O.F. are insurgency, counterinsurgency, unconventional warfare, terrorism, counterterrorism, foreign internal defense, counterinsurgency, unconventional warfare, and psychological operations.<sup>7</sup> According to the JOC, the defining characteristic of irregular warfare is its

focus on a relevant population and its strategic purpose of gaining and maintaining influence or control over that population.<sup>8</sup> It follows then that any measures of progress and effects when conducting irregular warfare activities must capture that same focus on a relevant population and human activities. Quite simply, since irregular warfare is a struggle to gain legitimacy and influence over a population, the force conducting irregular warfare needs measures that gauge influence and legitimacy. This focus on the human component of warfare presents one of the most significant challenges in determining effectiveness in irregular warfare.

This paper focuses on one major irregular warfare activity—counterinsurgency. Clearly the terms irregular warfare and counterinsurgency cannot be used interchangeably, and this paper does not intend to do so. The paper focuses on this particular irregular warfare activity because it is by far the most prevalent irregular warfare activity with which the U.S. military has been involved and has conducted in the recent past. The U.S. has been conducting it on a larger scale than any other irregular warfare activity. Furthermore, because so much of counterinsurgency depends on a host nation and its military's performance, measuring its progress and effects is more complex than other more direct aspects of irregular warfare. Finally, the paper recognizes that S.O.F.'s conduct of counterinsurgency capitalizes on tactics and techniques from its other core tasks, namely Foreign Internal Defense (FID), Unconventional Warfare (UW), and Counterterrorism (CT). Thus measuring progress and effects in a counterinsurgency will provide relevant cross-over to measuring progress and effects in other forms of irregular warfare.

Current U.S. military doctrine provides a starting point to determine progress and effectiveness through its discussion of measures of effectiveness (MOE). Joint doctrine defines a MOE as “a criteria used to assess changes in system behavior, capability, or operational environment that is tied to measuring the attainment of an end state, achievement of an objective, or creation of an effect.”<sup>9</sup> The U.S. Department of Defense’s joint counterinsurgency doctrine, JP 3-24, *Counterinsurgency Operations*, provides some very general information on MOE. It states that a force can measure changes in local attitudes, changes in public perceptions, changes in quantity or quality of information provided by individuals or groups, and changes in the economic or political situation of an area to assess an insurgency<sup>10</sup> without providing any more specificity or explanation of how such measures should be assessed or why they indicate progress against insurgents.

The U.S. Army’s current counterinsurgency manual provides some more information on MOE, specifically on MOE for conducting counterinsurgency operations. It recommends that all MOE for counterinsurgency operations be designed in keeping with four characteristics: they should be measurable, discrete, relevant, and responsive.<sup>11</sup> The first characteristic, measurability, indicates that a MOE should have a quantitative or qualitative standard against which it can be measured. Discreteness indicates that each MOE should measure a separate and distinct aspect of the condition that is being examined. The relevance characteristic simply reinforces the need for the MOE to be relevant to what the force is attempting to achieve. Finally, MOE must be responsive in order to detect changes in both the environment and situation quickly enough to be of use by facilitating effective changes or responses.

FM 3-24 does not provide specific examples of MOE for counterinsurgency operations, but it offers several “broad indicators of progress” that can be measured to assess environmental conditions. It does not, however, explain the difference between them and MOE.<sup>12</sup> These indicators include: acts of violence, dislocated civilians, human movement and religious attendance, presence and activity of business, level of agricultural activity, and others.<sup>13</sup> The indicators provide information on the current security and stability in an area, and when tracked over time could show whether the security situation is improving or worsening in the area. Hence it is logical to assume that one could use these to assist in formulating MOE, if they are tracked over time and compared with the situation at previous points in time. Because of their breadth, however, none could by themselves truly measure the effectiveness of a force’s operations. Hence although doctrine provides a starting point, it does not provide a checklist of MOE for use in specific situations.

U.S. military doctrine distinguishes between MOE and measures of performance (MOP). JP 3-24 defines MOP as “a criterion that is used to measure friendly action that is tied to measuring task accomplishment.”<sup>14</sup> The Army’s FM 3-24 expands slightly on that definition and states that MOP should measure whether or not a task was performed as the commander intended.<sup>15</sup> Thus MOP measure if “we’re doing things right” and MOE assess “if we’re doing the right things.”<sup>16</sup> This paper argues that when assessing irregular warfare actions, a force must understand the difference between MOE and MOP, and must use both MOE and MOP to accurately assess effectiveness and progress.

## Other Models

Looking beyond doctrine, there are other sources that provide insight on how to determine MOE in irregular warfare. In the mid-1980s the U.S. Central Intelligence Agency published a guide to the analysis of insurgency that offers an analytic framework, parts of which remain relevant and useful today. The guide recognized the significance of measuring effects of counterinsurgency efforts, and more importantly, recognized the requirement for a different standard of measure than that required for traditional warfare. As the guide states, “the ability to measure or assess who has control over an area and its population—the insurgents or the government—is an important element in an insurgency or counterinsurgency effort.”<sup>17</sup> The guide then describes three general areas that are determinants of control—and therefore effectiveness—in an insurgency and counterinsurgency: attitudes (favorable attitudes towards either the insurgent or counterinsurgent among the local populace and the ability to motivate people to take risks),<sup>18</sup> organization (the ability of organizations to mobilize and organize people, provide material, and exploit resources),<sup>19</sup> and security (the ability to protect supporters and the population, and local military effectiveness).<sup>20</sup> The guide provides examples of specific questions that the analyst could ask to measure each of the determinants, the answers to which could provide MOE. Although the guide predates the U.S military’s current concept of irregular warfare these determinants, with their emphasis on the population, reflect an understanding of the significance of the population to irregular warfare. Indeed, the guide is very clear that control and effectiveness are not measured by who has more physical capabilities such as guns, but by who has more sympathizers and committed supporters.<sup>21</sup>

As indicated above, Clancy and Crossett recognize the need to develop a framework to measure progress and effects in irregular warfare, and provide an excellent starting point for such a framework. They reinforce the requirement for appropriate MOE, and argue that everyone involved in irregular warfare must understand the data they face in terms of the overall effectiveness of the campaign; only then can they know if they must change policy, strategy, or operations.<sup>22</sup> In an effort to build the required framework to understand irregular warfare and then develop useful MOE they argue that the general population must perceive an insurgency as legitimate in order for it to survive; the insurgency must be “a legitimate avenue for addressing the needs of society.”<sup>23</sup> In developing MOE, therefore, a force must measure its effectiveness in three dimensions: sustainability (effectiveness in disrupting the enemy’s ability to sustain a continuing level of violence),<sup>24</sup> legitimacy (the counterinsurgent’s ability to “entrench their cause within the population),”<sup>25</sup> and stability (stability of the government as perceived by the population).<sup>26</sup> Clancy and Crossett further argue that the counterinsurgent force should focus on specific measures that will indicate success within a given environment, that usually the most influential of these measures focus on the sustainability and legitimacy dimensions,<sup>27</sup> and that these effects must be measured in three battle spaces: physical, cognitive, and information.<sup>28</sup>

Clancy and Crossett’s framework is in keeping with U.S. military doctrine on irregular warfare in that they also recognize the significance of the population. Their measures seek to identify indications within the population that the counterinsurgents’ activities are producing the desired effects. They support their analysis and provide examples of how such a framework could work by examining the Algerian insurgency.

As with the CIA's Guide to the Analysis of Insurgency, Clancy and Crossett's framework provides appropriate—albeit broad—direction to determine relevant measures of progress and effectiveness in irregular warfare.

One of the most detailed, well researched and well documented frameworks with which to study insurgency is the Small Wars Operational Research Design (SWORD) model. The SWORD model was developed by USSOUTHCOM to analyze insurgencies in the late 1970s and early 1980s and was the subject of Fishel and Manwaring's article in which, by examining 43 insurgencies around the world in the twentieth century, they theorized that seven dimensions, each composed of multiple variables, can impact an insurgency's success or failure.<sup>29</sup> As another way of describing the seven dimensions, Fishel and Manwaring theorized that in any insurgency, in addition to the "Guerilla War" that the belligerents were fighting, there were as many as six other "wars" being fought—one in each dimension. They identified those seven dimensions as: (1) host government military acts, (2) acts versus subversion, (3) unity of effort, (4) military acts of the intervening power, (5) supporting acts of the intervening power, (6) host government legitimacy, and (7) external support of insurgents.<sup>30</sup>

Based on his study of these factors Manwaring argued that a counterinsurgent's ability to control the situation was based on the presence, to at least some extent, of all of these dimensions. A counterinsurgent must therefore make a balanced effort across these dimensions to be effective.<sup>31</sup> In 2006, Manwaring and Fishel provided an updated examination of the SWORD model in which they updated the "wars within wars" and described them as the "legitimacy war," the "shooting war," the "war" to isolate belligerents from their internal support, the "war" to isolate belligerents from their



external support, the “war to stay the course,” the “intelligence and information wars,” and “wars” to unify into a single effort.<sup>32</sup> Of these, the legitimacy war to attack or defend the moral right of a government to exist<sup>33</sup> is the most important. Because a population’s grievances about politics, economics, and social conditions cause insurgencies the government must address these grievances first.<sup>34</sup>

Several aspects of the SWORD model make it much more useful than the other models discussed in this paper. First, the SWORD model is based on detailed research gathered from questionnaires that the authors of the model provided to civilian officials, military officials, and scholars with experience or expertise in any of 43 different insurgencies.<sup>35</sup> Thus behind the model is a significant amount of objective data upon which the model builders based their conclusions. Next, the SWORD model’s dimensions fully integrate all the elements of national power,<sup>36</sup> making the model relevant as the U.S. military continues to stress the significance of unity of action in all of its operations, and it can be applied at the tactical, operational, and strategic levels of war. Examining all the dimensions of the model in building assessment measures provides the analyst a truly holistic look at the operational environment and hence a holistic set of measures. Also, the SWORD model has withstood the test of time in that although it was developed over twenty years ago it can still effectively analyze and prescribe actions to counter non-state actors.<sup>37</sup> This makes it extremely relevant to counterinsurgents today.

Perhaps most the useful aspect of the SWORD model is that it accounts for the significance of the friendly military and government when analyzing an insurgency. This is important when we recognize that insurgencies and counterinsurgencies, as irregular

warfare activities, are primarily affected by a relevant population. Indeed, irregular warfare is defined as a struggle for legitimacy, so the fact that legitimacy is the most important dimension that the SWORD model identifies aligns it nicely with the current definition of irregular warfare. The SWORD model also accounts for the significance of the host nation military in insurgencies and counterinsurgencies. It requires analysis of the host nation military's performance to properly analyze and truly understand an insurgency. In other words, it recognizes that how insurgencies develop depends upon not just the insurgents themselves, but also upon how effectively the host nation responds to them.

Thus the SWORD model provides an effective framework for building measures of progress and effects in irregular warfare. Since one can use the model to isolate variables that lead to victory or defeat in counterinsurgencies<sup>38</sup> one can use the model to determine measures of progress and effects that assess those variables. Use of the SWORD framework to develop measures that assess progress and effectiveness in each of the seven dimensions would assure a force that it was accounting for and measuring all the significant factors affecting the insurgency.

### Contemporary Examples

Having examined what U.S. military doctrine provides on measuring progress and effects in irregular warfare and what other models may be helpful in such measurements, this paper will now examine several contemporary examples where the U.S. is supporting counterinsurgency and conducting related irregular warfare activities today in order to compare the measures being used with those discussed above.

*Pakistan.* The U.S. government's efforts to support the government of Pakistan in their counterinsurgency efforts provide a useful example from which to examine the

measurement of progress and effects in irregular warfare at the strategic level. In 2009, the National Security Council developed a set of performance measures to assess the effectiveness of the new U.S. government policy for Afghanistan and Pakistan. Public Law 111-32, the Supplemental Appropriations Act of 2009, directs the President to provide a report to Congress every 180 days on the progress of the policy, and the President's report uses these metrics established by the NSC with input from congress and other experts.<sup>39</sup> The metrics measure progress against the following supporting policy objectives that pertain to Pakistan: (1) disrupt terrorist networks in Afghanistan and especially Pakistan to degrade any ability they have to plan and launch international terrorist attacks, (2) assist efforts to enhance civilian control and stable constitutional government in Pakistan, (3) develop Pakistan's counterinsurgency (COIN) capabilities; continue to support Pakistan's efforts to defeat terrorist and insurgent groups, and (4) involve the international community more actively to forge an international consensus to stabilize Pakistan.<sup>40</sup>

The performance measures and assessment for the first objective are classified and hence beyond the scope of this paper. The second objective pertaining to assisting civilian control and stable constitutional government in Pakistan was assessed by various methods that are reflected in the President's report to congress. To begin with, the report addresses the level of confidence the Pakistani people have for both their government and their military. The report provides polling data collected by Department of State's Bureau of Intelligence and Research that measured the population's confidence in their civilian government and their confidence in the Pakistani national military.<sup>41</sup>

The report also assessed the economic situation in Pakistan; the degree to which the government supports under-protected groups such as religious minorities, refugees, and women; and the deepening partnership between the U.S. and Pakistan.<sup>42</sup> Furthermore, it reports on parliamentary actions taken to move towards a more representative government, shifting power trends within the federal government, Pakistan's ability to address humanitarian and social issues,<sup>43</sup> and the status of relations with Afghanistan.

Thus the measures used to assess this objective as reflected in the report measure the government's actions on behalf of the population, the government's ability to provide for the population, and the government's stability. These are all appropriate as performance measures in accordance with the SWORD model because they address elements of two of the seven dimensions of the SWORD model: "host government military acts" and "host government legitimacy." Hence these two measures are in keeping with the SWORD model and are therefore appropriate indicators to measure progress and effects.

For the next objective, which is to develop Pakistan's counterinsurgency capability, the report addresses the scope and effectiveness of the Pakistani military's counterinsurgency operations, the number of insurgent attacks against both civilians and the military, the Pakistanis' inability to control certain areas, the level of military-to-military cooperation between the U.S. and Pakistan, and structural or organizational improvements that the Pakistani military made.<sup>44</sup> Here again the measures reflected in the report's assessment reveal that they were also in keeping with dimensions of the

SWORD model, specifically “host government military acts,” “military acts of the intervening power,” and “supporting acts of the military power.”

The final objective dealing with Pakistan is to involve the international community more actively to facilitate stability in Pakistan. The report addresses such topics as opportunities that the Pakistani government missed to engage key donors due to a lack of political will,<sup>45</sup> how the U.S. government channeled its aid to Pakistan, the level to which the Pakistani government committed to building further support, and progress on bilateral ties with Afghanistan.<sup>46</sup> The measures reflected in the report on this objective also align with the dimensions of the SWORD model. The assessment of the U.S. government’s aid addresses the “supporting acts of the intervening power” dimension and all of the measures reflect an attempt to measure the dimension of “unity of effort,” at least by the external actors.

Although many of the dimensions of the SWORD model are accounted for in the President’s report, several significant dimensions are not addressed. There is nothing in the report to indicate that any measures were in place to assess the dimension of “external support to the insurgents.” Likewise, nothing in the report indicates that the authors measured anything in the “acts versus subversion” dimension. Hence the report reflects that appropriate measures of effects and progress were in place to provide a reasonably accurate depiction of the Pakistani government’s actions to counter the insurgency. However, in keeping with the SWORD model, a more complete picture requires establishing measures to assess the level of external support to the insurgents and acts that the government is taking against subversion.

*Mali.* U.S. S.O.F.'s efforts in Mali to counter Al-Qa'ida in the Islamic Maghreb provide another relevant example with which to examine how to measure progress and effects in irregular warfare from a theater or operational level perspective. The context of operations in Mali differs significantly from that of the previous example of Pakistan. In addition to the obvious differences of location, the insurgent threat in Mali lacks the resources and widespread popular support to instigate a larger "Taliban-like" insurgency such as exists in Pakistan.<sup>47</sup> Still, the threat from AQIM is significant enough to warrant U.S. action. Joint Special Operations Task Force-Trans Sahara (JSOTF-TS) therefore is working to build the capacity of host nations affected by AQIM, to include Mali. JSOTF-TS currently conducts operations to enable the Malian military to disrupt AQIM's logistics, finance, recruiting, and safe haven infrastructure and to support the U.S. embassy's efforts to counter extremist influences throughout Mali.<sup>48</sup>

To measure their progress and effects in Mali, JSOTF-TS conducts quarterly formal assessments using an operational capability assessment tool of their own design.<sup>49</sup> The assessment tool is structured to examine several aspects of each of eight of the nine principals of war as described in the Army's FM 3-0, *Operations*.<sup>50</sup> For each of the principals, the tool measures the following dimensions: (1) unity of command: the ability of the Malians to command and control their forces, to communicate, and the level to which the Malian units are able to achieve unity of effort through synchronized actions, (2) maneuver: number and effectiveness of combat operations, to include patrols, cache seizures, and key leader engagements that the Malians have conducted, (3) offensive: ability to gather and use intelligence and to issue effective operational orders, (4) mass: ability to synchronize actions to allow the commander to mass effects

at the decisive time and place, (5) economy of force: the quantity available and ability to use weapons, vehicles, communications, and medical support and equipment, (6) objective: presence of a campaign plan, conduct of patrols, and conduct and effectiveness of counter-recruiting, and (7) security and surprise: the ability to enforce operational security and use proper operational security and information security procedures.<sup>51</sup>

To use the tool, the user assigns a numerical value to rate the performance of the Malian military in each specific dimension, the total of which provides an overall assessment as to the Malian military's effectiveness.

It is clear that this assessment tool focuses primarily on the internal dimensions of the SWORD model. It addresses the dimensions of "host government military acts," "unity of effort," "military acts of the intervening power," and "supporting acts of the intervening power." It does not address the dimensions of "acts versus subversion," "host government legitimacy," nor "external support of the insurgents." Because of the nature of the insurgency that the Malians are attempting to counter these measures are appropriate and adequate to assess the progress and effectiveness of the counterinsurgents. As described above, the insurgency in Mali is much more limited in scope than that of the previous example in Pakistan. Because of that limited nature insurgent-based measures such as those that would be included in the SWORD model's "external support of insurgents" are more difficult to measure, if they can be measured at all. This serves to highlight an important point when determining measures of progress and effects in irregular warfare: sometimes the dimensions relating to the host nation government and its supporters are much more significant than

indicators relating to the adversary. In an insurgency such as that which AQIM is conducting in Mali the adversary may not be active to the point that one could gain any significant insights into progress and effects by trying to measure their actions, other than over a very long period of time. The only measures available (whether they are measures of performance or measures of effectiveness) may address only the host nation's government and military forces. This is logical in that in such indirect operations where one works through a host nation the only measures available at certain times may be indirect measures, such as measuring the performance and effectiveness of the host nation. Such measures are useful and appropriate to determine progress in irregular warfare, and in some cases are adequate by themselves.

*The Philippines.* The final example this paper will examine was derived in part from U.S. efforts to support the Philippine government's counterinsurgency in Mindanao and the Sulu archipelago.<sup>52</sup> As with the previous two examples, the context in the Philippines is unique. While American S.O.F. have executed and are executing irregular warfare activities similar to those in Afghanistan, Pakistan, and Iraq, such conditions as the political environment and rules of engagement are much different in the Philippines.<sup>53</sup> Hence one would expect the specific measures developed to reflect that uniqueness.

From their experiences in JSOTF-P as well as other experiences, the 1<sup>st</sup> Special Forces Group (Airborne) produced a population and resource control handbook titled "Who Owns the Neighborhood?" in order to inform their conduct of counterinsurgency with a special emphasis on population and resource control.<sup>54</sup> Along with the handbook,



they have developed a counterinsurgency assessment tool to facilitate thorough assessments of the situation and environment.<sup>55</sup> The assessment tool is intended to allow commanders to accurately describe a counterinsurgency environment by facilitating the collation of data which can then be used to assess the performance of the host nation in its counterinsurgency activities.<sup>56</sup> The handbook's emphasis on the requirement to conduct a thorough assessment—and its provision of a tool to do so—prior to beginning counterinsurgency operations is significant. A proper assessment is not only a critical first step to establish the best understanding of the environment possible in order to facilitate effective operations, it also provides an appropriate baseline against which to measure progress and effects. One must truly understand the environment before one can attempt to accurately measure what effects one's operations are having on that environment. The 1<sup>st</sup> SFG (A) handbook and assessment tools therefore provide an excellent framework to measure progress and effects.

The 1<sup>st</sup> SFG (A) COIN Assessment Tool consists of a total of sixty-two questions, with two to five indicators for each question. The questions are designed to assess each of the elements of national power (military, information, diplomatic, law enforcement, intelligence, financial, and economic) as well as religion and culture.<sup>57</sup> Operators enter the answers to these questions and indicators into an automated database and assign a numerical rating to assess the host nation's ability to perform each related task. The database then calculates a total score and applies a color code to indicate the host nation force's level of performance for each function. The tool therefore provides an extremely detailed system based on quantifiable data for assessing a counterinsurgent's abilities.

Although the stated purpose of the assessment tool is to allow commanders to accurately describe the environment through a detailed area and country assessment and then develop appropriate solutions,<sup>58</sup> a force could use the tool to move beyond the initial assessment and develop MOE as well. The assessment tool's focus on the instruments of national power plus religion and culture align it closely with many of the dimensions of the SWORD model. Specifically, the assessment tool provides the questions to obtain very detailed information on "host government military acts," "unity of effort," "host nation legitimacy," and to a much smaller extent, "external support of insurgents." Similar to the assessment tool that JSOTF-TS uses in Mali, this tool focuses heavily on the host nation military and government. It also recognizes the significance of the population in irregular warfare and counterinsurgency and focuses heavily on the perceptions, actions, and reactions of the population as well. It does not address "acts versus subversion," "military acts of the intervening power," or "supporting acts of the intervening power." To develop comprehensive MOE, therefore, a force could begin with the 1<sup>st</sup> SFG (A) assessment tool and develop and add measures related specifically to the dimensions of the SWORD model that it does not address, and then track those measures over time.

### Analysis

The above theoretical models and contemporary examples lead to several conclusions about how to measure progress and effects in irregular warfare. First, progress and effects can, and should, be measured at each of the levels of war: strategic, operational, and tactical. As the above contemporary examples show, the level of detail for measurement of progress and effects at the strategic level, such as the measures described in the NSC's report on Pakistan, will generally be more vague and

with a longer temporal dimension than measurements taken at the operational and tactical level. At the tactical level, as the 1<sup>st</sup> SFG (A) COIN Assessment Tool shows, the measures can be quite detailed, extremely specific, and generally focused on the short term.

Perhaps more significant, irregular warfare activities take place in a complex environment. Because the SWORD model addresses significant factors from across that environment, it continues to be a valid analytical framework with which to examine irregular warfare in general and more specifically counterinsurgency. Thus the more that measurements of progress and effects in counterinsurgency address each of the dimensions of the SWORD model, the more complete and accurate such measures will be. So the first part of answering the question of how to measure progress and effects in irregular warfare is to develop measures that assess each of the dimensions of the SWORD model.

Next, examination of the SWORD model taken together with the contemporary examples cited above demonstrate that the most significant measures of progress and effect may not focus on the enemy, but rather on the host nation's activities, abilities, and performance and on the actions and perceptions of the affected population. Because the nature of war will always entail opposing forces, one must always address the adversary's actions to some degree when measuring progress and effects. However, there is more to it than that. Because irregular warfare activities emphasize the significance of the population and irregular warfare objectives are often achieved indirectly, such as through a host nation's conduct of counterinsurgency, it is logical that to properly measure progress and effects we must assess the population and the host

nation's performance. Thus measuring progress and effects in irregular warfare entails much more than just counting the number of enemy killed or the size of an area occupied. It must measure items that are harder to quantify, such as a population's attitudes and perceptions, a government's legitimacy, and a counterinsurgent force's performance. Furthermore, there will always be aspects that are not quantifiable. As long as war remains a human endeavor, there will be aspects of war that will require human judgment to measure and assess.

This paper proposes that an effective way to properly measure progress and effects in irregular warfare is build MOE specific to each level of war and based upon the SWORD model framework to best account for the many variables affecting a complex environment. One must select measures that focus upon all of the major actors within that environment, including but not limited to the host nation's government and military, the intervening power, the insurgents and their external support, and the population and the extent to which the population sees the government as legitimate. For example, one should choose MOE that assess the performance of the host nation military and the effectiveness of its activities. Such measures could include evaluations of military operations that assess the effectiveness of those operations in securing the population, as in the case of the scope and effectiveness of Pakistani counterinsurgency operations, combined with polls that measure the population's confidence in the security provided by the military, as in the case of the polling data provided by Department of State's Bureau of Intelligence and Research on the Pakistani population's confidence in its government. One should select measures that reflect what actions the host government takes to counter subversion, and how effective the

host nation is in gaining unity of effort for all of its irregular warfare activities. These measures could include evaluations of the government's information campaigns and counter-propaganda efforts, supplemented once again by polling data that measures the population's view of the effectiveness of those programs. They could include examination of the host government's organization for conducting its irregular warfare campaign, and could measure the extent to which all departments of that government are working toward a single, unified objective, as JSOTF-TS measures in the Malian government. Likewise, one must select measures that indicate the effectiveness of the intervening power—both the effectiveness of its military as well as other supporting acts. For these measures, one could select direct indicators of the effects of intervening power military activities, as well as indirect indicators such as the effectiveness of host nation military, police, and intelligence organizations trained by the intervening power. Measures of supporting acts of the intervening power could address aid provided and its effect on the population, such as the NSC is measuring by various methods in Pakistan. One must measure the level to which the population views the host nation as legitimate, in such ways as polling data and the extent to which the population relies upon the government for such functions as security and provision of justice. Finally, one must measure the effects of any external support that the insurgents receive through such means as tracking the presence of weapons, explosives, and other externally-provided supplies to the insurgents as well as tracking the flow of funding to the insurgents.

The following table summarizes this analysis and provides hypothetical examples, taken from the actual examples of Pakistan, Mali, and the Philippines cited above, of measurements of performance and effects across the seven dimensions of

the SWORD model applied to each level of war. It is intended to be neither a checklist nor all inclusive, but rather to show how one might apply the measures this paper discusses:

Strategic Level	
SWORD Model Dimension	Example Measure
Host Government Military Acts	Is the host government military engaged in operations to clear insurgent groups? Does polling data indicate that the population feels more secure since the operations commenced?
Acts Versus Subversion	Does the host nation expeditiously counter insurgent propaganda with its own story in the national news media? Does polling data indicate the population supports the insurgents' message or the governments?
Unity of Effort	How is the government organized to conduct irregular warfare? Are the civil and military branches of the government engaged in the counterinsurgency operations working towards a unified purpose?
Military Acts of the Intervening Power	Is the intervening power providing appropriate military, intelligence, and law enforcement training to the host government?
Supporting Acts of the Intervening Power	Does the intervening power engage the international community on behalf of the host government to obtain aid and assistance?
Host Government Legitimacy	Does the host government address humanitarian and social issues?
External Support of the Insurgents	Do the insurgents receive funding or other external support from any external actors?
Operational Level	
SWORD Model Dimension	Example Measure
Host Government Military Acts	Has the host nation conducted any combat operations against the insurgents?
Acts Versus Subversion	Do government leaders engage the population through the media such as radio or television to counter the insurgents' message?
Unity of Effort	Is the host government operating from a counterinsurgency campaign plan that unifies its efforts?
Military Acts of the Intervening Power	Does the intervening military have an appropriate evaluation system to measure the progress of host nation's forces that it is training?
Supporting Acts of the Intervening Power	Does the intervening power distribute aid directly to the population, or through host nation institutions?
Host Government Legitimacy	Do the local and tribal leaders recognize the authority of the national government?
External Support of the Insurgents	Does the host government have a plan to interdict any external support that reaches the insurgents?
Tactical Level	
SWORD Model Dimension	Example Measure

Host Government Military Acts	Are the security forces actively organizing the population against the insurgents?
Acts Versus Subversion	Does the government monitor for and shut down pro-insurgent web sites?
Unity of Effort	Is there an active joint emergency operations center established?
Military Acts of the Intervening Power	Does the intervening power regularly conduct bi-lateral operations with the host government?
Supporting Acts of the Intervening Power	Has the intervening power identified critical resource shortages that the host military suffers, and are they working to fill those shortages?
Host Government Legitimacy	Has the host government initiated a process to redress the populace's grievances?
External Support of the Insurgents	Are border controls effective?

Table 1: Hypothetical Examples of Measurements Across the SWORD Dimensions<sup>59</sup>

### Conclusion

Thus there is no single, all-encompassing list of measures of progress and effects in counterinsurgency and irregular warfare, nor should there be. Every instance of the conduct of irregular warfare activities will occur in its own unique context so combatants must therefore tailor measures of progress and effect specific to that context. However, this paper has shown that there are some general principles that a force can apply when determining how to measure progress and effects.

The SWORD model provides an appropriate and useful framework for building measures of progress and effects. The lessons we learn from measuring progress and effects in counterinsurgency are relevant and can inform measure developed to assess progress and effects in other types of irregular warfare. Because irregular warfare is at its most basic level a struggle for legitimacy over a population any measures of progress and effects must include measurements of legitimacy. Current U.S. military doctrine provides a great starting point for building measures of progress and effects, but it is just that...a starting point. Analysts must then build measures specific to their own context and situation. Because counterinsurgency and many other forms of

irregular warfare are indirect activities, sometimes the measures relating to a host nation's government and military are much more significant to measuring progress than adversary-based indicators. And finally, it is important to recognize that because war is a human activity we will never be able to reduce measuring it to totally objective, scientific measures. The best a commander can do is look for indicators that measure as much of the environment as possible, and then use those measures to inform his estimates, opinions, and decisions.

### Endnotes

<sup>1</sup> Grant M. Martin, "COIN, Complexity, and Full-Spectrum Warfare: Is it possible to have Center of Gravity given all the Fog and Friction?" *Small Wars Journal* 6, no. 10 (October 2010): 6.

<sup>2</sup> James Clancy and Chuck Crossett, "Measuring Effectiveness in Irregular Warfare," *Parameters* 37, no. 2 (Summer 2007): 88.

<sup>3</sup> U.S. Joint Chiefs of Staff, *Doctrine for the Armed Forces of the United States*, Joint Publication 1 (Washington, DC: March 20, 2009), 1-6.

<sup>4</sup> *Ibid.*, GL-8.

<sup>5</sup> *Ibid.*, 1-6 – 1-7.

<sup>6</sup> John J. Mulbury, *My Personal Theory of War*, Theory of Warfare and Strategy Paper (Carlisle Barracks, PA: U.S. Army War College, September 20, 2010), 5.

<sup>7</sup> The entire list of irregular warfare operations and activities is: Insurgency, Counterinsurgency (COIN), Unconventional warfare (UW), Terrorism, Counterterrorism (CT), Foreign internal defense (FID), Stabilization, security, transition, and reconstruction operations (SSTRO), Strategic communications, Psychological operations (PSYOP) and Information operations (IO). U.S. Joint Chiefs of Staff, *Irregular Warfare Joint Operating Concept Version 1.0* (Washington, DC: September 11, 2007), 9.

<sup>8</sup> *Ibid.*, 9.

<sup>9</sup> U.S. Joint Chiefs of Staff, *Counterinsurgency Operations*, Joint Publication 3-24 (Washington, DC: October 5, 2009), GL-7.

<sup>10</sup> *Ibid.*, X-16 – X-17

<sup>11</sup> U.S. Department of the Army, *Counterinsurgency*, Field Manual 3-24 (Washington, DC: U.S. Department of the Army, December 2006), 5-27.



<sup>12</sup> Ibid., 5-27 – 5-28.

<sup>13</sup> The other broad indicators of progress are: presence or absence of associations, participation in elections, government services available, freedom of movement of people, goods, and communications, tax revenue, industry exports, employment/unemployment rate, availability of electricity, specific attacks on infrastructure. FM 3-24, Table 5-7, 5-28.

<sup>14</sup> JP 3-24, GL-7.

<sup>15</sup> FM 3-24, 5-27.

<sup>16</sup> U.S. Department of the Army, *1<sup>st</sup> Special Forces Group (Airborne) Population Resource Control Handbook: Who Owns the Neighborhood* (Fort Lewis, WA: 1<sup>st</sup> Special Forces Group (Airborne)), 39.

<sup>17</sup> *Guide to the Analysis of Insurgencies*, (Washington, DC: Central Intelligence Agency, 1986), 8.

<sup>18</sup> Ibid., 9.

<sup>19</sup> Ibid., 9-10.

<sup>20</sup> Ibid., 10-11.

<sup>21</sup> Ibid., 8.

<sup>22</sup> Clancy and Crossett, 89.

<sup>23</sup> Ibid., 93.

<sup>24</sup> Ibid., 95.

<sup>25</sup> Ibid., 95.

<sup>26</sup> Ibid., 96.

<sup>27</sup> Ibid., 98.

<sup>28</sup> Ibid., 98-99.

<sup>29</sup> Max G. Manwaring and John T. Fishel, "Insurgency and Counter-Insurgency: Toward a New Analytical Approach," *Small Wars and Insurgencies*, vol. 2, no. 3 (Winter 1992): 289.

<sup>30</sup> Ibid., 289.

<sup>31</sup> Max G. Manwaring, "Toward an Understanding of Insurgency Wars: The Paradigm," in *Uncomfortable Wars: Toward A New Paradigm of Low Intensity Conflict*, ed. Max G. Manwaring (Boulder, CO: Westview Press, 1991), 24

<sup>32</sup> John T. Fishel and Max G. Manwaring, *Uncomfortable Wars Revisited* (Norman, OK: University of Oklahoma Press: 2006), 21-26.

<sup>33</sup> Ibid., 21.

<sup>34</sup> Ibid., 20.

<sup>35</sup> Manwaring and Fishel, "Insurgency and Counterinsurgency," 276.

<sup>36</sup> Fishel and Manwaring, *Uncomfortable Wars Revisited*, 258.

<sup>37</sup> Edwin G. Corr, "Foreward," in *Uncomfortable Wars Revisited*, viii.

<sup>38</sup> Fishel and Manwaring, *Uncomfortable Wars Revisited*, 266.

<sup>39</sup> Barak Obama, "Report on Afghanistan and Pakistan, 2010," September 30, 2010, <http://www.fas.org/man/eprint/wh-afpak.pdf> (accessed November 11, 2010), 1.

<sup>40</sup> Ibid., 2.

<sup>41</sup> Ibid., 3.

<sup>42</sup> Ibid., 4.

<sup>43</sup> Ibid., 5-6.

<sup>44</sup> Ibid., 9-11.

<sup>45</sup> Ibid., 12.

<sup>46</sup> Ibid., 13-15.

<sup>47</sup> Lianne Kennedy-Boudali, *Examining U.S. Counterterrorism Priorities and Strategy Across Africa's Sahel Region*, (Santa Monica, CA: RAND Corporation, 2009) 2.

<sup>48</sup> JSOTF-TS Commander COL Nestor Sadler, "Assessment Report – Developing Malian Military Security Capacity (08 JUL 09 – 02 JUL 10), memorandum for record, Stuttgart, GE, July 19, 2010.

<sup>49</sup> JSOTF-TS J3 LTC Christopher Schmitt, "Mali Quarterly Assessment," Encl 1 "Mali Operational Assessment Tool," memorandum for record, Stuttgart, GE, October 21, 2010.

<sup>50</sup> The other principal of war not included in the assessment tool is simplicity. U.S. Department of the Army, *Operations*, Field Manual 3-0 (Washington, DC: U.S. Department of the Army, February 2008), A-1 – A-3.

<sup>51</sup> "Mali Operational Assessment Tool."

<sup>52</sup> JSOTF-P Commander David S. Maxwell, "Commander's Summary of the Joint Special Operations Task Force Philippines (JSOTF-P)," memorandum for record.

<sup>53</sup> Ibid., 2.

<sup>54</sup> U.S. Department of the Army, *1<sup>st</sup> Special Forces Group (Airborne) Population Resource Control Handbook: Who Owns the Neighborhood*.

<sup>55</sup> U.S. Department of the Army, *1<sup>st</sup> Special Forces Group (Airborne) Population Resource Control Handbook: Who Owns the Neighborhood Assessment Tool*.

<sup>56</sup> *Ibid.*, 1.

<sup>57</sup> *Ibid.*, 3-8.

<sup>58</sup> *Ibid.*, 1.

<sup>59</sup> Obama, "Report on Afghanistan and Pakistan; "Mali Operational Assessment Tool;" U.S. Department of the Army, *1<sup>st</sup> Special Forces Group (Airborne) Population Resource Control Handbook: Who Owns the Neighborhood Assessment Tool*.

